Breastfeeding: Best for Baby and Mother

Breastfeeding the Late Preterm Infant

By: Eyla G. Boies, MD, FAAP
SOBr Member

The late preterm designation refers to infants born three to six weeks before their due date. These infants are deceptive in that they often appear robust, however, the literature confirms that these infants are at greater risk for infections, respiratory distress, temperature instability, hypoglycemia, hyperbilirubinemia, dehydration, readmission to the hospital, and even death as compared to the infant born at term. Some of the problems reported in the literature are related to suboptimal breastfeeding. The challenge for us is to make sure these physiologically vulnerable infants thrive while receiving the benefits of their mother's milk.

The United States has seen a dramatic increase in the number of preterm births from 9.6% in 1992 to 12.3 % in 2003. The late preterm infant accounts for 66% of this increase, and if one excludes multiple births, 75% of preterm deliveries are late preterm.[1] In July of 2005 the National Institutes for Children's Health and Human Development convened a panel of experts to review the issues related to these infants. One of the first things they did was change the nomenclature. Instead of calling these infants near term they suggested the designation "late preterm" to emphasize the fact that they are really premature and more accurately reflect their immature physiology and subsequent vulnerabilities. In addition, the gestational age for inclusion in this category was lowered from 35 weeks to 34 weeks completed weeks counting from the first day of the last normal menstrual period. Reasons for lowering the gestational age included improved infant survival rates and reduced rates of admission to neonatal intensive care units for infants delivered at or greater than 34 weeks.

Inside this issue:

Although the reasons for the dramatic increase in late preterm births are not entirely understood, several factors likely play a role. Included among these is advanced maternal age due to women delaying child birth or experiencing difficulties conceiving. Assisted reproductive technology allows many of these mothers to become pregnant but often with a twin or higher order multiple pregnancy. As the age of mothers and the incidence of obesity increases we see more mothers with preexisting medical conditions such as Type II diabetes and essential hypertension becoming pregnant. These factors all increase the risk for a preterm delivery. There have been a number of studies that have documented the increase incidence of neonatal problems encountered by infants born in the late preterm time period. To list a few:

- Wang [2] reported increased temperature instability, hypoglycemia, IV fluid administration, respiratory distress and clinical jaundice in near term (35 to 36 6/7 weeks gestation) infant as compared to infants born full term.
- Escobar [3] demonstrated increased rate of readmission for infants born 35 to 37 weeks of gestation as compared to infants born after 37 weeks. In addition they found an increased mortality in infants born at 35-36 weeks (6.9/1000 live births vs. 2.5/1000 live births) as compared to term infants.
- Young [4] analyzed death certificates for all infants born in Utah from 1999 to 2004 and found a progressive statistically significant increase of death for each week of prematurity beginning at 38 completed weeks through 34 completed weeks for gestation.
- The late preterm breastfed infant was overrepresented in the 125 infants reported to the Kernicterus Registry from 1992 – 2003.[5] More concerning was the fact that these infants were discharged from the hospital as healthy newborns. Continued on page 2.

Breastfeeding the Late Preterm Infant (cont'd)

- Shapiro-Mendoza[6] recently reported a doubling of newborn morbidity during birth hospitalization for each week of increasing prematurity beginning at 38 weeks. In their study 25% of infants born at 35 weeks and 52% of infants born at 34 weeks experienced morbidity during birth hospitalization.

These studies and others are remarkably consistent in their findings that support the increased risk for morbidity and even mortality for each additional week of prematurity. Of note, many of these studies find that even infants born 37 to 37[6/7] weeks are also at increased risk for neonatal problems as compared to infants delivered ≥38 weeks gestation.

The study by Wang found that feeding problems were the predominant reason for delay of discharge of the late preterm infant. Shapiro-Mendoza [7] found that late preterm infants breastfed at discharged were at increased risk of neonatal morbidity. Suboptimal breastfeeding was a major factor in the development of kernicterus in the late preterm infants who were reported to the Kernicterus Registry noted above. Thus some of these problems are related to feeding difficulties, specifically difficulties with breastfeeding.

For those of us helping the mother and late preterm infant with breastfeeding it is important that we understand how the CNS compares to that of the full term infant. The brain weight of the infant born at 34 weeks is 65% of what it would have been if the infant had delivered at term. In addition the brain is smoother with much less development of gyri. There is a dramatic increase in dendritic and synapse formation in the period after 34 weeks gestation. With these facts in mind, it is easy to understand why these infants tend not to wake up when they should be hungry and why they may not have the coordination to suckle at the breast effectively in addition to reduced strength and stamina as compared to the full term infant.

Most late preterm infants recover from acute problems that might be encountered in the first few days of life such as respiratory distress, hypoglycemia, temperature instability and rule out sepsis evaluations quickly. In my experience even those who have had a delay of discharge have recovered and are discharged by 7 to 10 days of age. Even though they are ready to be discharged from the hospital, many of these infants still have breastfeeding "issues" and are at risk for hyperbilirubinemia, failure to thrive, and failure to achieve full breastfeeding. Thus the care of these infants is not just the domain of neonatologists or the physician covering the newborn service but all pediatricians caring for late preterm infants in the outpatient setting.

We must also realize that the mother of the late preterm infant is often not well. That is, the medical condition that resulted in the preterm delivery may affect mother's health and her ability to produce breast milk. A recent report by Shapiro-Mendoza,[6] found a positive correlation between the presence of a maternal medical condition (hypertensive disorders of pregnancy, antepartum hemorrhage, lung disease, infection, cardiac disease, renal disease, genital herpes) and an increased risk for morbidity in the late preterm infant. Thus when approaching the care of the late preterm infant, we must consider maternal factors as well as infant factors.

Dr. Yvonne Vaucher and I wrote Academy of Breastfeeding Medicine Protocol #10: Breastfeeding the near-term infant.[8] Our recommendations for caring for the late preterm infant were developed around principals of care that could be used in the in and outpatient settings. Continued on page 3.

Save the Date

American Academy of Pediatrics NCE

Where: Haynes Convention Center, Boston, Massachusetts

When: October 11-14, 2008

General Breastfeeding Sessions
Check Conference Program for Dates and Times

- Anti-Infective Components of Human Milk
- Developing Clinical Breastfeeding Skills (Beginner and Advanced)
- Collaboration Between the Pediatrician and WIC
- Vitamin D Recommendations—It's Not Just Rickets Anymore!

Section on Breastfeeding Program
Sunday October 12, 2008
Benefit and Risk Counseling

Academy of Breastfeeding Medicine 13th Annual International Meeting

Where: Ritz Carlton Hotel, Dearborn, Michigan

When: October 23-26, 2008

The AAP Chapter Breastfeeding Coordinator Session will be held Thursday October 23, 2008 from 5:00—7:00 pm.

All Section on Breastfeeding Members are welcomed to attend. Please make your travel plans accordingly!

Breastfeeding the Late Preterm Infant (cont'd)

The principals in caring for the late preterm infant:

1. Anticipate and prevent frequently encountered problems by having a written policy and order set specific for the late preterm infant on the newborn unit.

2. Assessment and observation should include determination of gestational age with obstetrical measurements, Dubowitz or Ballard score on the infant at birth. Careful observation for first 12 to 24 hours should be done to assure physiologic stability. This may mean that the infant needs to be monitored in the NICU for the first few hours. Objective assessment of breastfeeding such as a LATCH score by nursing staff should be performed on all late preterm infants twice a day and documented in the record. The primary care provider should observe and assess breastfeeding in the office if there is any question about adequacy of breastfeeding. Daily weights should be taken on a digital scale with calculation of percent of weight loss from birth on the newborn unit and the same measurements and calculations be performed in the outpatient office. Test weights should be performed when there is a question about adequacy of breast milk intake at a given feed.

3. Communication should be facilitated by the use of crib cards in the bassinette stating the feeding plan. Discharge summaries and feeding plans should be transmitted to the primary care provider at discharge. The primary care provider must obtain careful feeding, stooling, and voiding history from mother at time of office visits. Feeding plans, even in the outpatient setting, should be clearly stated to the parents, preferably in writing.

4. Timely lactation support should include a lactation consultation for all late preterm infants within the first 24 hours on the newborn unit. Prompt referral should be made to a lactation consultant if problems with latch and milk extraction are encountered in the outpatient setting.

5. Education of nurses, physicians, parents and other family members about lactation should be routine and ongoing.

6. Avoid separation of mother and baby if possible. Antibiotics and phototherapy can be given while the infant is rooming in if the infant is stable.

7. Discharge should occur only when the infant is deemed ready for discharge. This is not likely to occur before 48 hours of age. The late preterm infant is ready for discharge when he is maintaining or gaining weight, temperature has been stable for 24 hours, mother has an adequate supply of milk or there is a plan for supplementation, effective milk transfer is documented, bilirubin has been assessed, a post-discharge feeding plan has been written, and an outpatient office visit is scheduled for the infant to be seen within 48 hours of discharge.

In summary those of us at University of California San Diego want the late preterm infant to prove herself, that is, we do not wait for her to get into trouble and then jump in with support.

My recommendations for the future include:

1) Reconsider the inclusion of the 34 week infant in the late preterm category as the literature finds that as many as 50% of those infants have neonatal morbidity.

2) Consider including the 37 week gestation infant in the late preterm category as those infants also have significant morbidity as compared to the term infant.

3) More research should be done to evaluate obstetrical practice in determining the optimal time to deliver the high risk pregnancy.

4) More research is needed to understand how maternal medical conditions affect the newborn and her ability to produce milk.

5) More research should be done to determine how best to care for and optimize breastfeeding the late preterm infant. References on page 5.

The AAP Positions Its Support Behind the Federal Breastfeeding Promotion Act!

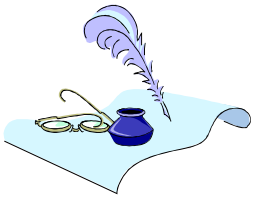
By: Jennifer Thomas, MD, FAAP, SOBr Member and WI CBC and Kathleen Marinelli, MD, FABM, FAAP, SOBr Member and CT CBC

The AAP has recently endorsed the federal Breastfeeding Promotion Act (HR 2236) for the first time. The Breastfeeding Promotion Act is a bipartisan bill at the national level that will protect breastfeeding mothers from discrimination and encourage new mothers to breastfeed. HR 2236, introduced by Rep. Carolyn Maloney (D-NY) and Christopher Shays (R-CT), will amend the Civil Rights Act of 1964 to protect all women from being fired or facing discrimination in the workplace because they make the decision to breastfeed their children. In addition, the bill provides tax incentives for businesses that establish private lactation areas in the workplace; it establishes a performance standard that is currently non-existent for all breast pumps on the market; and permits families to take breastfeeding supplies as tax deductible items.

Women with infants are the fastest growing segment of the population in the workforce making this legislation timely and needed. Employers who already provide lactation support in the workplace have benefited from cost savings, reduced absenteeism, higher employee morale and loyalty, and a family- friendly reputation within their community. The passage of the Breastfeeding Promotion Act would accomplish significant steps toward extending these benefits to all breastfeeding mothers and their employers in our country.

Affordable and preventive healthcare begins with breastfeeding. Breastfeeding mothers in the United States are half as likely to miss a day of work for a sick child compared to mothers of formula feeding infants. Healthcare costs and insurance claims are significantly lower for breastfed infants. For every 1,000 babies not breastfed, there are 2,033 excess physician visits, 212 excess hospitalization days and 609 excess prescriptions for ear, respiratory, and gastrointestinal infections. This has a huge economic impact not only on our businesses, but also on the individual families involved. By passing this legislation, everybody wins!

Currently, only 14 states have workplace legislation to help breastfeeding families. These laws are inconsistent in their content and the protections they confer. The Breastfeeding Promotion Act will extend more comprehensive protection for breastfeeding mothers nationally.



What can you do?

Pediatricians can support this important effort by requesting that their congressional representative co-sponsor this bill. AAP members can access a letter to send to their representative at http://aap.grassroots.com/breastfeedingpromotionact/. And you can pass this message on to your patients and staff, other pediatricians, family practitioners, obstetricians, and other medical colleagues and concerned health care professionals to do the same!

The promotion, protection and support of breastfeeding are national and global priorities for improved public health. The Breastfeeding Promotion Act addresses the crucial need for support of breastfeeding mothers in the workforce. All new mothers have the right to the opportunity and the support to breastfeed their children, and all children have the right to be breastfed. This is your opportunity to help protect that right!

AAP Letter to Send to Your Representative
http://aap.grassroots.com/breastfeedingpromotionact/
Full Text of the Bill
http://www.govtrack.us/congress/billtext.xpd?bill=h110-2236
Tracking of The Bill's Progress
http://www.govtrack.us/congress/bill.xpd?bill=h110-2236
Fact Sheet on the Breastfeeding Promotion Act
http://maloney.house.gov/documents/olddocs/breastfeeding/050505summary.rtf

The bill has been referred to the following committees:
House Ways and Means, House Energy and Commerce, House Energy and Commerce, Subcommittee on Health
House Education and Labor

Section on Breastfeeding Commentary From the Chair

Ruth A. Lawrence, MD, FABM, FAAP

SOBr Chairperson

Your Section on Breastfeeding (SOBr) is working hard to make breastfeeding the norm. The SOBr Executive Committee (Lori Feldman-Winter, Jane Morton, Audrey Naylor, Larry Noble, and Laura Viehmann) has been actively pursuing a number of channels including the following:

SOBr Lectureship Grants—The Section is excited to support the three SOBr Lectureship Grants for 2008. Breastfeeding education events will take place in Nevada (grantee – Pamela Greenspon, MD, FAAP), Maryland (grantee – Dana Silver, MD, FAAP), and Puerto Rico (grantee – Desiree Pagan, MD, FAAP). If you are located in these states contact the grantee to see how you can become involved or participate in the event (contact lbarone@aap.org for contact information).

Revised Coding Document—We are particularly grateful to Christina Smillie, MD, FAAP, SOBr Member for her work with the AAP Committee on Coding and Nomenclature to complete the revision of "Breastfeeding and Lactation: The Pediatrician's Guide to Coding" document. The new version includes new telephone and non face-to-face codes and other updates. It is available online at http://www.aap.org/breastfeeding/CODING.pdf. Many kudos to Tina.

New CBC Subcommittee—The breastfeeding coordinators group has become an official subcommittee of the Section under the inspiring leadership of Julie Ware. The coordinators cover all of the AAP territories and are serving as our ambassadors to the entire membership state by state. We are looking to them to be sure all our section members feel welcome in the section. They have also been charged with the task of increasing our membership one physician at a time. The coordinators are serving as very effective advocates for our legislative issues since they have access to their local legislators on a more personal basis. If you do not know who your breastfeeding coordinator is e-mail Lauren Barone and ask. Join your local activities as you can appreciate there is a lot to do for the coordinators and a lot of work at the grass roots level.

Opportunity to Review and Comment on AAP Publications—Many of our fellow sections and committees are offering us an opportunity to review their policies and publications prior to publishing. We welcome this opportunity to work with them and to assure that breastfeeding is appropriately included in all these policies and publications.

Come to the AAP NCE! The plans for the SOBr Program at the fall AAP NCE in Boston October 11-14, 2008 are complete. The breastfeeding presentations are well worth the trip and bring a number of experts together to participate. I also hope to see many abstract submissions and a lively poster session. Our Section will meet on Sunday, October 12 from 8:00 am – 3:00 pm Eastern Time (exact location to be determined, check your conference schedule). Make your plans to be there! The posters, the platforms, and the general meeting of the membership will be, as always, top-notch. Take this opportunity to gain some new knowledge, share some insights, and network with fellow section members.

Let us hear from you, if you have suggestions, comments or complaints. Email me at: Ruth_Lawrence@URMC.Rochester.edu

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Late Preterm—pages 1—3

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SOBr Research Reviews

Woo, J. et al. Breastfeeding Helps Explain Racial and Socioeconomic Status Disparities in Adolescent Adiposity. Pediatrics. 2008; 121: e458 – e465

Commentary by Lawrence Noble, MD, FAAP, SOBr Executive Committee Member

Breastfeeding has been reported as being protective against obesity, but this association is controversial. While several studies have found significantly lower obesity rates among those who were breastfed as infants and even a dosage-related effect of breastfeeding, not all studies support these findings. A recent study from Cincinnati Children's Hospital sheds new light on the subject. Data was analyzed from 739 black and white 10 to 19 year old adolescents who participated in a large, school-based study. Parents provided information on parental education, used to measure socioeconomic status, and whether the child was breastfed as an infant. The study showed that 40% of white adolescents were breastfed for more than 4 months, compared to 11% of black adolescents. Similarly, 40% of children with at least one college-educated parent were breastfed for more than four months, versus 18% of those with less-educated parents. Being breastfed for > 4 months, was associated with lower adolescent BMI z scores, less "at risk of overweight," defined as a BMI $\geq$ 85th percentile, and less "overweight," defined as a BMI $\geq$ 95th percentile, independent of race or parental education. In addition, lower rates of breastfeeding could explain approximately 25% of the racial and socioeconomic disparity in BMI. The authors speculate that increasing breastfeeding duration could result in lower adolescent adiposity for all racial and socioeconomic status groups and potentially minimize socioeconomic disparities in obesity. The authors explain that other studies that do not show an independent effect of breastfeeding with obesity may have treated race and socioeconomic status as confounding factors, rather than mediation factors. In mediation the independent variable is treated as having a causal relationship, rather than being incidental. Breastfeeding could directly affect childhood weight gain, as it allows the infant to control how much they eat, which could have a long-term effect on children's ability to self-regulate their calorie intake. Animal experiments have revealed that neonatal nutrition influences the development of neuroendocrine circuits in the mediobasal hypothalamus that regulates appetite control and body weight, with long-term consequences for risk of obesity.

Manganaro R, Marseglia L, Mamì C, Palmara A, Paolata A, Loddo S, Gargano R, Mondello M, Gemelli M. Breast milk sodium concentration, sodium intake and weight loss in breastfeeding newborn infants. Br J Nutr. 2007 Feb;97(2):344-8.

Commentary by Jane Morton, MD, FABM, FAAP, SOBr Executive Committee Member

Why is it important that breast milk samples taken on the 3rd postpartum day, correlate with infants' daily breast milk intake and percentage weight loss in healthy newborn infants? Before this report, it had been demonstrated that elevated breast milk sodium BM [Na+] during early lactogenesis is predictive of poor breastfeeding outcomes.[1-2] In this study, mothers of 208 exclusively breastfed term infants provided a hand-expressed sample of milk, which was defatted and analyzed for sodium. They confirmed that BM[Na+] was inversely related to breast milk intake.

The fact that samples in this study were taken on the 3rd day is most important. Current understanding is that the paracellular junctions automatically close within the first several days, decreasing the permeability between maternal blood and milk. In contrast to the more nutritious make-up of mature milk, the blood-born nature of colostrum (the first immunization, if you will) reflects a highly protective composition of volume-expanding sodium, immunoglobulins and cells. Most references state the closure of these junctions depends on hormonal postpartum changes, such as the drop in progesterone, and precedes the onset of copious milk production.[3] This has given support to the unqualified, long-held notion that milk automatically comes in, regardless of frequent and effective removal of the small aliquots of colostrum in the first days.

This is the first paper to show BM [Na+] does not automatically drop during this time frame, raising several important clinical issues. If colostrum removal is insufficient, and paracellular junctions remain open, is subsequent milk production compromised? It has been shown that the longer BM [Na+] remains elevated, the less likely the infant will be exclusively breastfed at 1 month. If paracellular junctions remain open, does this suggest that viral particles and drugs may more likely cross into the milk? Would aggressive removal of colostrum reduce early transference of HIV?

In the first 3 days, many babies are ineffective breast-feeders and many mothers cannot remove colostrum with electric pumps. Frequent hand-expression in the first 3 days has been shown to improve milk production at 2 weeks in pump-dependent mothers.[4] Perhaps this article provides more support for teaching all new mothers this skill before leaving the hospital. For a step by step demonstration on hand expression, please see website http://newborns.stanford.edu/Breastfeeding/HandExpression.html. References on page 5.

Top Ten Things I Learned at the National Conference of State Breastfeeding Coalitions—January 2008

By: Maya Bunik, MD, MD, MSPH, FABM, FAAP

Thirty AAP Chapter Breastfeeding Coordinators attended the United States Breastfeeding Committee National Conference of State Breastfeeding Coalitions in January 2008 in Washington, DC. Dr Bunik was one of the attendees at this meeting!

#10 The Business Case for Breastfeeding Toolkit is coming soon…http://ask.hrsa.gov/detail.cfm?PubID=MCH00250. This is a Resource Kit on Lactation Support in the Workplace that focuses on the business perspective and is designed for employers and human resources staff as well as employees. It has 5 modules that includes brochure on cost savings for businesses, easy steps to support breastfeeding employees with time and space, templates that can be adapted to individual businesses, employees' guide to combining breastfeeding and working and also an outreach marketing guide. Emphasis is also on importance of working toward paid maternity leave which is necessary to truly improve breastfeeding continuation rates.

#9 CDC State Report Card 2007 is a useful tool for strategizing your state's needs. Dr. Grummer-Strawn nicely summarized the 2007 report and emphasized the new tracking regarding exclusivity at 3 and 6 months. This chart has information on breastfeeding rates, number of Baby Friendly Hospitals, number of lactation consultants per live births, mother to mother support, legislation, etc. by state. For details go to http://www.cdc.gov/breastfeeding/data/report_card.htm.

#8 Federal Breastfeeding Bill HR 2236 for the Breastfeeding Promotion Act sponsored by Senator Mahoney has only 23/200 co-sponsor legislators in support currently. We are hopeful that next year after the presidential campaign energy is settled that it will get more momentum. It is never too soon to contact your legislators. See page 4 for more information!

#7 Oregon's Experience With Breastfeeding Legislation. Champion legislation experiences were shared by Oregon, New York and Massachusetts. "Ban the Bags" took perseverance by the breastfeeding coalition advocates as well as some peer pressure for hospitals. No one hospital wanted to be the only one not doing it. Catch-phrase they used was memorable: "Giving away free formula in a hospital Labor and Delivery unit is essentially the same as giving away Big Macs in the Cardiac Care Unit – can you imagine a hospital doing that?" In addition in Oregon, stronger workplace legislation took 10 years of work and a volunteer citizen lobbyist with a passion—they changed it from a watered down law to a newer stronger one. It is not useful to have a law that merely *encourages* businesses to work with mothers—you need a mandate. This information was so empowering for me—I returned to Colorado to lead the drafting and organizing of testimonies for our bill for workplace accommodation. At the time of this writing we are awaiting the final vote in the Senate. If all goes as planned we will be the 16th state to have a law on workplace accommodation for breastfeeding mothers.

#6 Make Breastfeeding Education Happen Where Physicians Already Go! Washington State Coalition presented a model for providing physicians with evidence-based lactation education and based on their experience—they emphasized that it needs to happen when and where they (MDs) already go—Grand Rounds, noon meetings and other CME conferences.

#5 How to Talk to the Media. Joan Detz gave us hints for talking to the media—always have an index card with 3 points that you want to make and make them no matter what they ask you! Simple stats are good as well as nice rhetorical phrases e.g. 'if neurons fire together they wire together', 'breastfeeding saves lives.'

#4 Pumping Facilitates Breastfeeding! When talking about workplace support we need make the point that we are 'facilitating breastfeeding by helping mothers express milk so that they can come together and nurse their baby at the end of the day'. It is not just about pumping milk for the baby…(Oregon Amelia Psmythe)

#3 Be Prepared. When lobbying, have a one page fact sheet with bullet points to discuss with and/or leave with the legislator.

#2 Finally Support for Breastfeeding! It is an exciting time to be advocating for breastfeeding--especially with the program and financial support from governmental agencies that enabled all the 50 states to come together again a second time to share ideas! It was a tremendous conference for networking with other CBCs and coalitions at breakfast table topics or break-out workshops or at the dinner gathering. I find the women I meet in this breastfeeding field are the most engaging and inspiring of all my medical conferences. There is comfort and empowerment in being like-minded in this cause.

#1 Colorado Breastfeeding Journal Club Presentation. It was an honor to present a workshop on our Colorado Breastfeeding Journal Club with my mentor of many years, Dr. Marianne Neifert. I have a tremendous respect for her and others who were trying to move mountains in their last 25 years of breastfeeding advocacy, research and clinical support for mothers and babies.

Contact Us!

Do you have questions or comments about the newsletter or the Section in general. Contact us!

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So You're a Section Member Now!

Welcome new SOBr members!

If you are reading this newsletter for the first time, then it is highly likely you are a new member of the AAP Section on Breastfeeding. Some have been asking "What can I do?" First enjoy the benefits, including this newsletter, that unite us as a section. Take a look at the Section Mission and Vision Statements on the last page of the newsletter and consider what you are already doing. If you are ready to take on more you might contact the newsletter editor, Susan Landers, MD at slanders@austin.rr.com with a letter or an article, contact your Chapter Breastfeeding Coordinator to join in breastfeeding advocacy activities in the state (you will find the names on the section website) attend and/or request breastfeeding CME activities locally or nationally, and join us at the Section on Breastfeeding events in October at the AAP National Conference and Exhibition in San Francisco.

WELCOME

Malika Shah, MD, FAAP
Tara Cancellaro, MD, FAAP
Gail Dolan, MD, FAAP
Jennifer Trittman, MD
Nina Burchen, MD, FAAP
Pamela Udomprasert, MD
William Dukart, MD
Julie Kellog, MD
Felice Glaser-Schanzer, MD
Loanne Tran, MD
Christina Valentine, MD, FAAP
Angela Gianini, MD, FAAP

Section on Breastfeeding Accolades!

San Bernardino County Supervisor, Josie Gonzales, presented a breastfeeding resolution on March 27, 2008 to Bruce Smith MD, founder of Inland Empire Breastfeeding Coalition, and Carol Melcher, RN, MS. They were recognized for their work in promotion of breastfeeding in San Bernardino County. San Bernardino County currently has 6 breastfeeding friendly hospitals and 5 more will be breastfeeding Friendly by next year. Touraj Shafai, MD, FAAP, SOBr Member, CA2 CBC, is an active member of the successful Inland Empire Breastfeeding Coalition.

Pictured above—Carol Melcher, RN, MS, Bruce Smith MD, Josie Gonzalez, and Touraj Shafai, MD, FAAP.

From the Chief Breastfeeding Coordinator—How to Talk the Talk to Those Who May Not Be Interested in Listening!

Julie Ware, MD, FABM, FAAP
Chief CBC
(Julie and her husband pictured left)

Recent discussions have popped up from some of our members about how to work with other physicians who aren't as passionate about breastfeeding as we are. The SOBr is here to help you!

For speaking with those in pediatrics, we have the benefit of the AAP resources to use in these cases. Many of these physicians may be AAP members, and *may* be more likely to respond to AAP materials. When meeting with a colleague to discuss breastfeeding consider taking the various AAP resources with you, including:

The Breastfeeding and the Use of Human Milk Policy Statement—http://aappolicy.aappublications.org/cgi/content/full/pediatrics;115/2/496

The Breastfeeding: Baby's First Immunization Poster- http://www.aap.org/breastfeeding/PDF/BFIZPoster.pdf

The Infant Feeding During Disasters: Breastfeeding and Other Options fact Sheet- http://www.aap.org/breastfeeding/PDF/InfantNutritionDisaster.pdf

The AAP Breastfeeding Handbook for Physicians—http://tinyurl.com/6924nk

The AAP New Mother's Guide to Breastfeeding—http://tinyurl.com/5j9qzj

Breastfeeding and Lactation: Pediatricians' Guide to Coding—http://www.aap.org/breastfeeding/CODING.pdf

Grand Rounds is a great way to go over the policy statement and the revised Speaker's Kit is available to download for you. We are also in the process of developing a Speaker's Bureau, so you could invite someone from the "outside" who will always be "smarter"! We will continue to have our yearly AAP SOBr lectureship grants available for you to apply for, and the AAP CATCH program also has visiting professor grants available on a yearly basis. Remember to use the CBC list of "Back Door" ways to get breastfeeding into the discussion (see the Winter 2008 newsletter!)

Bringing food is always a good way to get your foot "in the door" of practices where you'd like to share your knowledge. In our Memphis community, we were able to get a small nutrition grant through one of our nutritionists to provide food and Medications and Mother's Milk, by Thomas Hale, PHD, to practices where we did Lunch and Learn sessions. We know that there are several CBCs who are currently doing similar programs in their states including: Georgia, Pennsylvania, Missouri, and Washington. We're hoping to get more information from these colleagues soon and help to format these opportunities for you all to take "on the road" without reinventing the wheel. ***Stay tuned...*** Dr. Lawrence and others often emphasize the need for physicians to learn from other physicians. *So* ***our*** time spent in these endeavors may have a great payoff in the future.

For speaking with our colleagues in other specialties, we can access the various statements from their own organizations: e.g. ACOG, AAFP. The CDC Maternity Care Practices, the DHS Blueprint, USBC Breastfeeding Agenda, white papers, etc, Healthy People 2010 (soon 2020) goals, CDC Report Card – all of these help to lend credence to our message. Of course the ABM protocols are excellent materials to hand out to specific audiences, or print out and give as a gift to those you are hoping to encourage (a labeled notebook with the protocols in page protectors, with named dividers looks very nice!) A copy of our ABM journal "Breastfeeding Medicine" is also a nice touch to bring to a gathering. We also have liaisons in our SOBr Leadership Team from these organizations who could possibly help with challenging situations. Contact Julie or Lauren for their contact information! (julieware2@bellsouth.net lbarone@aap.org)

"There are 3 groups of people; the naysayers, the fence-sitters and the choir. Leave the naysayers alone, you'll waste time and energy and get frustrated. Spend a lot of time with the fence sitters. Keep them leaning to your side and you'll get some of them to join the choir. Reinforce the choir with support and enthusiasm." - Bev Johnson with the Institute for Family Centered Care

Welcome

To our new CBC!

Ann Kellams, MD, FAAP Virginia

Challenging Breastfeeding Case—Vitamin D?

Submitted by Margreete Johnston, MD, FABM, FAAP, SOBr Member, CBC TN

A baby girl was born the summer of 2005 at 37 weeks gestation by uncomplicated, spontaneous vaginal delivery to a G2 25y/o African-American mother. Her pregnancy was complicated by Type 1 diabetes managed by insulin pump. Prenatal care was complete. The mother's diabetes was near optimal control with prenatal hemoglobin A1c ~ 6 %. The father of the baby was involved and supportive. The maternal grandmother was a doula. The mother attended college but her plans were to stay home with her two children until her newborn was ready to wean.

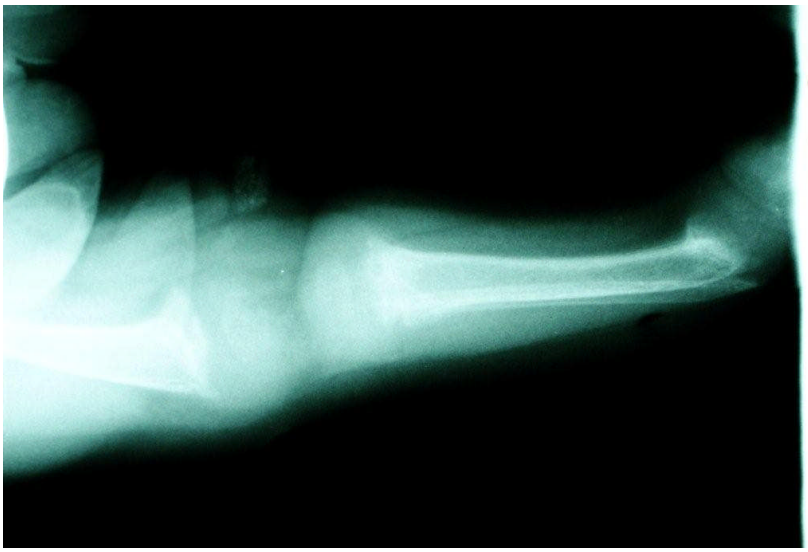
Baby girl A was vigorous at birth, weighing 7# 4 oz; her glucose normalized without intervention. Early and frequent breast-feedings were initiated, and no difficulties were noted. Baby girl A was seen in the primary care office for routine well child checks. She returned to birth weight at three weeks, and subsequently followed the 5th percentile growth curve taking in breast milk exclusively.

Mother and baby were separated for three days when the older brother was hospitalized for a severe infection in the late fall of 2005. In addition, the mother was hospitalized for one week with diabetic ketoacidosis in December.

Baby girl A was seen with influenza in February 2006 at age 7 months. She continued to nurse but showed little interest in solid food. She missed her 9 month check up. At one year she returned to the office with her mother's chief complaint of "she's not standing". The mother had not bought or used multivitamins as prescribed, as she did not feel they were really necessary and insurance would not pay.

The baby's physical exam revealed growth failure starting at 9-12 months, and swelling over the distal ends of her long bones. X-rays in the office confirmed classical signs of vitamin D deficiency rickets with osteopenia, widened metaphases, and moth-eaten ephiphises. Her laboratory evaluation showed a markedly elevated alkaline phosphatase, a low level of 25-hydroxy Vitamin D and normal serum calcium and phosphorus levels. The remainder of her laboratory findings was normal.

This case reveals two important features of bone metabolism in breastfed babies. It is well documented that exclusively breastfed babies born in winter climates who do not receive supplementation with Vitamin D are at risk for rickets. Persons of dark complexion, such as African-Americans and people who cover to avoid sunlight, are at higher risk for Vitamin D deficiency. Mothers with type one diabetes may also be a subset of individuals who have low calcium stores or altered calcium metabolism themselves. Ruth Lawrence has said "when you see rickets, always look at the mother." A mother in delicate balance with her own health may not provide optimal nutrition with exclusive breastfeeding for her baby through the first year of life. Growth and nutritional status should be monitored carefully, especially between 6 and 9 months of age when many babies are transitioning to solid foods while breastfeeding.



*** Radiographic findings consistent with rickets (change in long bones).**

Vitamin supplementation, including 400 IU of vitamin D per day, is recommended. I would suggest that this recommendation be given the same emphasis as vaccinations. Vitamin D deficient rickets is a preventable condition. Two years after treatment baby girl A is walking and running; however, on exam, she still has a rachitic rosary, widened metaphases, and slightly bowed lower extremities. The typical bowing of the lower extremities is not seen with rickets until the child begins to bear weight. She continued to breastfeed through her first year; taking multivitamins and calcium supplementation.

The Origins of World Breastfeeding Week

Submitted by Audrey Naylor, MD, DrPH, FABM, FAAP, SOBr Executive Committee Member

This summer from August 1 through August 7, the world will once again celebrate World Breastfeeding Week (WBW). Introduced in 1997 by the World Alliance for Breastfeeding Action (WABA), WBW is a strategy to bring global attention to the continuing need to protect, promote and support breastfeeding and optimal maternal, infant and young child nutrition everywhere. Each year since initiated twelve years ago, a primary theme has been identified for WBW in order to help give focus to a particular issue needing attention in the complexities of promoting, protecting and supporting breastfeeding. This year's theme, *Mother Support – Going for the Gold,* was chosen to emphasize the importance of supporting mothers to assure that every child has a "golden" start and to utilize opportunities presented by public interest in the nearly simultaneous occurrence of the summer Olympic Games in early August. WBW is one of the many worldwide breastfeeding promotion efforts managed by the WABA central office in Penang, Malaysia. Using the theme selected for the year, materials are created and made available to any group wanting to carry out activities in their community or through their organization. These items, available in English, French, and Spanish, can be viewed and downloaded from the WABA website (www.waba.org.my).

The first week in August is not a random choice for this annual event but was selected because it has particular historical importance to breastfeeding promotion. July 30 - August 1, 1990 senior policy makers from thirty nations (including the US) participated in a WHO/ UNICEF sponsored meeting in Florence, Italy. This gathering, co-sponsored by the US Agency for International Development (USAID) and the Swedish International Development Authority (SIDA) produced a document that continued to have worldwide influence, The Innocenti Declaration. It identified four operational targets for all governments: 1] appoint a national coordinator and establish a national breastfeeding committee, 2) ensure that every facility providing maternity services practices the Ten Steps to Successful Breastfeeding, 3) take action to give effect to the principles of the International Code of Marketing and 4) enact legislation to protect the breastfeeding rights of working women. To encourage and ensure continued progress of the Global Initiative, in February 1991, UNICEF convened a brainstorming session with individuals active internationally in breastfeeding promotion activities. Recommendations included the formation of a worldwide network of individuals and organizations dedicated to breastfeeding promotion and on February 14, 1991 WABA was formed.

Over the next five years, WABA became firmly established and in 1996 planning began for an annual world breastfeeding week. In August of 1997 the first WBW was launched with the theme: *Breastfeeding – Nature's Way.* The response of breastfeeding advocates worldwide was more than enthusiastic and WBW is now celebrated in over 120 countries.

AAP Section on Breastfeeding members are urged to visit the WABA website for suggestions on ways to demonstrate this year's theme: *Mother Support – Going for the Gold* during WBW, August 1 – 7!

Breastfeeding Friendly NICU in the CHOC

Submitted by Mary DiNicola, NP, MSN, CLC, and Harry Pellman, MD, FAAP, SOBr Member and CA4 CBC

In Sept 2001, with funding from The Children and Families Commission of Orange County, the Children's Hospital of Orange County (CHOC) hired its first lactation consultant and launched what has blossomed into a very successful lactation program. Inpatient and outpatient consultations, as well as staff education and community outreach, are provided by the hospital's lactation service. CHOC, a 232 bed pediatric referral center serving southern California, boasts a 42 bed "breastfeeding friendly" level IV NICU. On any given day, 75-95% of NICU babies have breast milk available. Based primarily in the NICU, the inpatient service implements the following recipe for breastfeeding success: early contact with families, early access to quality pumping equipment, "Kangaroo Mother Care", galactagogue therapy when needed, transition to breastfeeding as early as possible, and exquisite follow up.

Another strategy that has helped our successful program is the implementation of feeding protocols, all using mother's own milk or banked breast milk. Designed by CHOC's neonatal nurse practitioner and her team, the protocols follow weight based incremental advancement of feedings from trophic to full feeding volumes followed by fortification. Excellent outpatient follow-up is critical because many babies are discharged well before their due date, and it often takes a baby until at least their due date to have the tongue, lip, and jaw endurance to breastfeed well. The follow-up is provided by board certified family nurse practitioner lactation consultants. The outpatient lactation center provides NICU follow up as well as primary lactation health care to high risk moms and babies. Staff education and buy-in is critical to the success of the lactation program. Continued page 12. The lactation staff may initiate breastfeeding education to family members, however it is reinforced by every member of a NICU team, including physicians, developmental and feeding therapists, translators, nurses, nurse practitioners, dietitians, social workers, parent service coordinators, case managers and the transport team. Our NICU is breastfeeding friendly because of this supportive staff. One year comparison data from before and after introduction

of the human milk based protocols showed better outcomes. In the less than 1000 gram babies, feedings were initiated 8 days earlier, full feeding volumes and fortification were achieved 17-20 days earlier, better median weight gain was achieved at 36 weeks CGA (+258 grams), central line days decreased from 45 to 39 days, and babies were discharged home an average of 3 weeks earlier.

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Section on Breastfeeding
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Mission Statement

The mission of the Section on Breastfeeding is to help all infants, children, adolescents, and young adults served by members of the AAP to attain optimal physical, mental, and social health through breastfeeding. To this purpose, the Section dedicates its efforts and resources. The Section will accomplish this mission by addressing the breastfeeding needs of infants, children, their families and communities and by supporting AAP members through breastfeeding advocacy, education, research, and service, as well as promoting the systems through which the members deliver breastfeeding care.

Vision Statement

Children will have optimal health and well-being through breastfeeding; and breastfeeding will be valued by society. AAP members will provide family-centered, culturally-effective, evidence-based care for breastfeeding infants and children, as well as for their families and communities.

Newsletter Editors

Susan Landers, MD, FAAP
Lauren Barone, MPH

Section on Breastfeeding

The Section on Breastfeeding, established in July 2000, offers networking and educational opportunities for AAP members interested in breastfeeding promotion and management. Currently, there are 600 members, making it one of the larger sections in the Academy.

Section Objectives:
1. Maintain a permanent body for development of AAP policy recommendations on breastfeeding.
2. Enhance and expand educational efforts of the Academy in the area of breastfeeding, including presentation of educational sessions at AAP national meetings, coordination of national Continuing Medical Education (CME) conferences, development of educational publications and curricula, provision of materials and technical assistance to practitioners, and other educational initiatives.
3. Develop liaison and collaborative relationships with other sections and committees of the Academy and with outside organizations.

Section Activities:
Educational and Networking Opportunities: An annual business meeting is held as well as other educational sessions and activities at AAP national, state, and other conferences.
Breastfeeding Promotion in Physicians' Office Practices Program: The Breastfeeding Promotion in Physicians' Office Practices (BPPOP III) program works to provide culturally effective breastfeeding promotion and support to underserved families toward Healthy People 2010 breastfeeding initiation and duration goals.
Chapter Breastfeeding Coordinators: Encourages state activities related to the support and promotion of breastfeeding.
Recognition: Members can highlight their programs and activities in the newsletter.
Development and Publication: The Section develops books and other documents to educate physicians and others on breastfeeding.
Policy Statements: The Section develops policy statements and reviews statements relevant to breastfeeding.

If you would like more information about the many benefits of being a Section on Breastfeeding member, please email lactation@aap.org.